

**Complete If Known**

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Complete if Known	
Application Number	10/551,054
Filing Date	§371 (c) Date: September 23, 2005
First Named Inventor	BACHMANN, Martin F.
Art Unit	1648
Examiner Name	MOSHER, Mary
Attorney Docket Number	1700.0590000/BJD/WBC

Sheet	1	of
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.†	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
		Country Code* Kind Code* (in known)	MM-DD-YYYY			
	A09	EP 0 468 520 A2	01/29/1992	Tokunaga <i>et al.</i>		
	AP9	WO 92/11291 A1	07/09/1992	Van Wijnendale <i>et al.</i>		
	AL10	WO 94/02499 A1	02/03/1994	Padmapriya <i>et al.</i>		
	AM10	WO 95/26204 A1	10/05/1995	Hutcherson <i>et al.</i>		
	AN10	WO 96/02555 A1	02/01/1996	Krieg		
	AO10	EP 0 772 619 B1	05/14/1997	Krieg <i>et al.</i>		

Examiner Signature /Mary Mosher/	Date Considered 04/07/2008
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(Use as many sheets as necessary)

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**WHAT YOU KNOW**

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MOSHER, Mary

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**FOREIGN PATENT DOCUMENTS**

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	AL12	WO 99/11275 A2	03/11/1999	Ray		
	AM12	WO 99/29723 A1	06/17/1999	Hall		
	AN12	WO 99/51259 A2	10/14/1999	Krieg <i>et al.</i>		
	AO12	WO 00/06588 A1	02/10/2000	Krieg		
	AP12	WO 00/14217 A2	03/16/2000	Wagner <i>et al.</i>		
	AL13	WO 00/23955 A1	04/27/2000	Schiller <i>et al.</i>		

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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<b>Filing Date</b>	§371 (c) Date: September 23, 2005
<b>First Named Inventor</b>	BACHMANN, Martin F.
<b>Art Unit</b>	1648
<b>Examiner Name</b>	MOSHER, Mary
<b>Attorney Docket Number</b>	1700.0590000/BJD/WBC

Sheet	4	of	4	Attorney Docket Number	1700.0590000/BJD/WBC
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## FOREIGN PATENT DOCUMENTS

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		Country Code* Kind Code* (in known)	Publication Date MM-DD-YYYY			
	AM13	WO 02/10416 A1	02/07/2002	Gowans <i>et al.</i>		
	AN13	WO 02/056905 A2	07/25/2002	Renner <i>et al.</i>		
	AI13	WO 03/030656 A2	04/17/2003	Babiuk <i>et al.</i>		
	AP13	WO 03/040308 A2	05/15/2003	Klinman <i>et al.</i>		
	AL14	WO 03/045431 A2	06/05/2003	Vicari <i>et al.</i>		
	AM14	WO2005/014110 A1	02/17/2005	Bachmann <i>et al.</i>		

Examiner Signature /Maly Mosher/	Date Considered	04/07/2008
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<b>FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Application Number</b>	10/551,064
				<b>Filing Date</b>	§371 (c) Date: September 23, 2005
				<b>First Named Inventor</b>	BACHMANN, Martin F.
				<b>Art Unit</b>	1648
				<b>Examiner Name</b>	MOSHER, Mary
<b>Sheet</b>	1	of	6	<b>Attorney Docket Number</b>	1700.0560000/BJD/WBC

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published	†2	
	NPL84	Ballas, Z.K., et al., "Induction of NK Activity in Murine and Human Cells by CpG Motifs in Oligodeoxynucleotides and Bacterial DNA," <i>J Immunol</i> 157(5):1840-5, The American Association of Immunologists, Inc. (1996)		
	NPL85	Bartholomé, E.J., et al., "IFN- $\beta$ Interferes with the Differentiation of Dendritic Cells from Peripheral Blood Mononuclear Cells: Selective Inhibition of CD40-Dependent Interleukin-12 Secretion," <i>J Interferon Cytokine Res</i> 19(5):471-8, Mary Ann Liebert, Inc. (1999)		
	NPL86	Blackwell, S.E., and Krieg, A.M., "CpG-A-Induced Monocyte IFN- $\gamma$ -Inducible Protein-10 Production is Regulated by Plasmacytoid Dendritic Cell-derived IFN- $\alpha$ ," <i>J Immunol</i> 170(8):4061-8, The American Association of Immunologists Inc. (April 2003)		
	NPL87	Branda, R.F., et al., "Amplification of antibody production by phosphorothioate oligodeoxynucleotides," <i>J Lab Clin Med</i> 128(3):329-38, Mosby-Year Book Inc. (1996)		
	NPL88	Cella, M., et al., "Maturation, activation, and protection of dendritic cells induced by double-stranded RNA," <i>J Exp Med</i> 189(5):821-9, The Rockefeller University Press (1999)		
	NPL89	Cella, M., et al., "Plasmacytoid monocytes migrate to inflamed lymph nodes and produce large amounts of type I interferon," <i>Nat Med</i> 5(8):919-23, Nature America Inc. (1999)		
	NPL90	Clark, B., et al., "Immunity against both polyomavirus VP1 and a transgene product induced following intranasal delivery of VP1 pseudocapsid-DNA complexes," <i>J. Gen. Virol.</i> 82:2791-2797, Society for General Microbiology (2001)		
	NPL91	Dalpké, A.H., et al., "Phosphodiester CpG oligonucleotides as adjuvants: polyguanosine runs enhance cellular uptake and improve immunostimulative activity of phosphodiester CpG oligonucleotides <i>in vitro</i> and <i>in vivo</i> ," <i>Immunology</i> 106(1):102-12, Blackwell Science Ltd. (May 2002)		
	NPL92	Goeckeritz, B.E., et al., "Multivalent cross-linking of membrane Ig sensitizes murine B cells to a broader spectrum of CpG-containing oligodeoxynucleotide motifs, including their methylated counterparts, for stimulation of proliferation and Ig secretion," <i>Int Immunol</i> 11(10):1693-700, Oxford University Press (1999)		
	NPL93	Halperin, S.A., et al., "A phase I study of the safety and immunogenicity of recombinant hepatitis B surface antigen co-administered with an immunostimulatory phosphorothioate oligonucleotide adjuvant," <i>Vaccine</i> 21(19-20):2461-7, Elsevier Science Ltd. (June 2003)		

<b>Examiner Signature</b> /Mary Mosher/	<b>Date Considered</b> 04/07/2008
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<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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				Application Number	10/551,054
				Filing Date	§371 (c) Date: September 23, 2005
				First Named Inventor	BACHMANN, Martin F.
				Art Unit	1848
				Examiner Name	MOSHER, Mary
Sheet	2	of	6	Attorney Docket Number	1700.0590000/BJD/WBC

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	NPL94	Halpern, M.D., et al., "Bacterial DNA Induces Murine Interferon- $\gamma$ Production by Stimulation of Interleukin-12 and Tumor Necrosis Factor- $\alpha$ ," <i>Cell Immunol</i> 167(1):72-8, Academic Press Inc. (1996)	
	NPL95	Hartmann, G., et al., "CpG DNA: A potent signal for growth, activation, and maturation of human dendritic cells," <i>Proc Natl Acad Sci U S A</i> 96(16):9305-10, National Academy of Sciences (1999)	
	NPL96	Heath, A.W., "Cytokines and the Rational Choice of Immunological Adjuvants," <i>Cancer Biother</i> 9(1):1-6, Mary Ann Liebert, Inc., Publishers (1994)	
	NPL97	Iho, S., et al., "Oligodeoxynucleotides Containing Palindrome Sequences with Internal 5'-CpG-3' Act Directly on Human NK and Activated T Cells to Induce IFN- $\gamma$ Production In Vitro," <i>J Immunol</i> 163(7):3642-52, The American Association of Immunologists (1999)	
	NPL98	Ioannou, X.P., et al., "CpG-containing oligodeoxynucleotides, in combination with conventional adjuvants, enhance the magnitude and change the bias of the immune responses to a herpesvirus glycoprotein," <i>Vaccine</i> 21(1-2):127-37, Elsevier Science (November 2002)	
	NPL99	Kerkmann, M., et al., "Activation with CpG-A and CpG-B Oligonucleotides Reveals Two Distinct Regulatory Pathways of Type I IFN Synthesis in Human Plasmacytoid Dendritic Cells," <i>J Immunol</i> 170(9):4465-74, The American Association of Immunologists Inc (May 2003)	
	NPL100	Kline, J.N., et al., "Modulation of Airway Inflammation by CpG Oligodeoxynucleotides in a Murine Model of Asthma," <i>J Immunol</i> 160(6):2555-9, The American Association of Immunologists (1998)	
	NPL101	Kline, J.N., et al., "Treatment of established asthma in a murine model using CpG oligodeoxynucleotides," <i>Am J Physiol Lung Cell Mol Physiol</i> 283(1):L170-9, American Physiological Society (July 2002)	
	NPL102	Klinman, D.M., "Immunotherapeutic Uses of CpG Oligodeoxynucleotides," <i>Nat Rev Immunol</i> 4(4):249-58, Nature Publishing Group (April 2004)	
	NPL103	Klinman, D.M., et al., "CpG motifs present in bacterial DNA rapidly induce lymphocytes to secrete interleukin 6, interleukin 12, and interferon $\gamma$ ," <i>Proc Natl Acad Sci U S A</i> 93(7):2879-83, National Academy of Sciences (1996)	

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<b>Sheet</b>	3	of	6	<b>Attorney Docket Number</b>	1700.0590000/BJD/WBC

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	NPL104	Klinman, D.M., et al., "CpG oligonucleotides improve the protective immune response induced by the anthrax vaccination of rhesus macaques," <i>Vaccine</i> 22(21-22):2881-6, Elsevier Ltd. (July 2004)		
	NPL105	Krieg, A.M., "CpG Motifs in Bacterial DNA and Their Immune Effects," <i>Annu Rev Immunol</i> 20:709-60, Annual Reviews (April 2002)		
	NPL106	Krieg, A.M., "Mechanisms and applications of immune stimulatory CpG oligodeoxynucleotides," <i>Biochim Biophys Acta</i> 1489(1):107-16, Elsevier Science (1999)		
	NPL107	Krieg, A.M. and Davis, H.L., "Enhancing vaccines with immune stimulatory CpG DNA," <i>Curr Opin Mol Ther</i> 3(1):15-24, Thomson Scientific (2001)		
	NPL108	Krieg, A.M., et al., "CpG motifs in bacterial DNA trigger direct B-cell activation," <i>Nature</i> 374(6522):546-9, Nature Publishing Group (1995)		
	NPL109	Krieg, A.M., et al., "Oligodeoxynucleotide Modifications Determine the Magnitude of B Cell Stimulation by CpG Motifs," <i>Antisense &amp; Nucleic Acid Drug Dev</i> 6(2):133-9, Mary Ann Liebert, Inc. (1996)		
	NPL110	Krug, A., et al., "CpG-A Oligonucleotides Induce a Monocyte-Derived Dendritic Cell-Like Phenotype that Preferentially Activates CD8 T Cells," <i>J Immunol</i> 170(7):3468-77, The American Association of Immunologists, Inc. (April 2003)		
	NPL111	Lee, S.W., et al., "Effects of a Hexameric Deoxyriboguanosine Run Conjugation into CpG Oligodeoxynucleotides on Their Immunostimulatory Potentials," <i>J Immunol</i> 165(7):3631-9, The American Association of Immunologists (2000)		
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	NPL114	Mahon, B.P., <i>et al.</i> , "The Rational Design of Vaccine Adjuvants for Mucosal and Neonatal Immunization," <i>Curr Med Chem</i> 8(9):1057-75, Bentham Science Publishers (2001)		
	NPL115	Pisetsky, D.S. and Reich, C.F., "Stimulation of Murine Lymphocyte Proliferation by a Phosphorothioate Oligonucleotide with Antisense Activity for Herpes Simplex Virus," <i>Life Sci</i> 54(2):101-7, Pergamon Press (1994)		
	NPL116	Putney, S.D., <i>et al.</i> , "Enhanced Anti-Tumor Effects with Microencapsulated c-myc Antisense Oligonucleotide," <i>Antisense Nucleic Acid Drug Dev.</i> 9:451-8, Mary Ann Liebert Inc. (1999)		
	NPL117	Raz, E., "Introduction: gene vaccination, current concepts and future directions," <i>Springer Semin Immunopathol</i> 19(2):131-7, Springer-Verlag (1997)		
	NPL118	Raz, E., <i>et al.</i> , "Preferential induction of a Th1 immune response and inhibition of specific IgE antibody formation by plasmid DNA immunization," <i>Proc Natl Acad Sci USA</i> 93(10):5141-5, National Academy of Sciences (1996)		
	NPL119	Sato, Y., <i>et al.</i> , "Immunostimulatory DNA Sequences Necessary for Effective Intradermal Gene Immunization," <i>Science</i> 273(5273):352-4, American Association for the Advancement of Science (1996)		
	NPL120	Schwarz, K., <i>et al.</i> , "Role of Toll-Like receptors in costimulating cytotoxic T cell responses," <i>Eur. J. Immunol.</i> 33:1465-70, WILEY-VCH Verlag (June 2003)		
	NPL121	Semple, S.C., <i>et al.</i> , "Lipid-Based Formulations of Antisense Oligonucleotides for Systemic Delivery Applications," <i>Methods Enzymol.</i> 313:322-41, Academic Press (2000)		
	NPL122	Siegal, F.P., <i>et al.</i> , "The Nature of the Principal Type 1 Interferon-Producing Cells in Human Blood," <i>Science</i> 284(5421):1835-7, American Association for the Advancement of Science (1999)		
	NPL123	Takauji, R., <i>et al.</i> , "CpG-DNA-induced IFN- $\alpha$ production involves p38 MAPK-dependent STAT1 phosphorylation in human plasmacytoid dendritic cell precursors," <i>J. Leukoc. Biol.</i> 72:1011-1019. Wiley-Liss (November 2002)		

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Application Number</b>	10/551,054
				<b>Filing Date</b>	\$371 (c) Date; September 23, 2005
				<b>First Named Inventor</b>	BACHMANN, Martin F.
				<b>Art Unit</b>	1648
				<b>Examiner Name</b>	MOSHER, Mary
<b>Sheet</b>	5	of	6	<b>Attorney Docket Number</b>	1700.0590000/BJD/WBC

<b>NON PATENT LITERATURE DOCUMENTS</b>				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>	
	NPL124	Uhlmann, E. and Vollmer, J., "Recent advances in the development of immunostimulatory oligonucleotides," <i>Curr Opin Drug Discov Devel</i> 6(2):204-17, Thomson Scientific (March 2003)		
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	NPL126	Verthelyi, D., et al., "CpG oligodeoxynucleotides improve the response to hepatitis B immunization in healthy and SIV-infected rhesus macaques," <i>AIDS</i> 18(7):1003-8, Lippincott Williams & Wilkins (April 2004)		
	NPL127	Verthelyi, D., et al., "Human Peripheral Blood Cells Differentially Recognize and Respond to Two Distinct CPG Motifs," <i>J Immunol</i> 166(4):2372-7, The American Association of Immunologists (2001)		
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	NPL130	Weiner, G., "Declaration of Dr. George Weiner Under 37 CFR §1.32," submitted in support of US Application No. 09/286,098, 9 pages (2000)		
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	NPL133	Yamamoto, T., et al., "Synthetic oligonucleotides with certain palindromes stimulate interferon production of human peripheral blood lymphocytes in vitro," <i>Jpn J Cancer Res</i> 85(8):775-9, Japanese Cancer Association (1994)		

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